

Math Anytime

Anytime is a good time to do something mathy!

- Notice numbers, patterns, sizes and shapes in the world, ask questions about them and try to figure out the answers
 - Challenge each other with questions like: *How many grandmas tall is that tree? What day will we be halfway through the summer? Is Harvard Square really square? How many m&m's will you eat in a year?*
- Explore math and art with coloring
 - Color one of the attached mathematical patterns. What do you notice while you are coloring?
 - You can find more fabulous math coloring pages in books like *Patterns of the Universe* and *Visions of the Universe* by Alex Bellos & Edmund Harris or *1 to 100 Cubes* and *1 to 100 Circles* by Mark Gonyea.
- Play games
 - Choose fun, family games that aren't pure chance, but instead involve some reasoning, choices and strategic thinking about scoring. (*Play together & discuss strategy!*)
 - Dice games: Tenzi, LCR Dice game, Yahtzee, Liar's Dice
 - Card games: Sleeping Queens, Monster Café, Coloretto, 6 Nimmt, Kodama, Set
 - Board games: Quirkle, Blokus, Machi Koro, Kingdomino
 - Or play any game and invent a new scoring system (*eg: Rock Paper Scissors, but each win is worth 7; Apples to Apples, but first round is worth 1, second round is worth 2...*)
- Check out the daily math fun on *Bedtime Math*
 - <http://bedtimemath.org>
 - A fascinating story each day with a related math problem for little and big kids.
 - Perfect for promoting some cool family math discussion each day!
- Try some fun Mathy Game Apps
 - Look for engaging games that go beyond just fact practice.
 - 2048 (doubling, spatial thinking)
 - Kakooma (addition puzzles)
 - Wings (multiplication adventure)
 - Door 24 (make 24 using different operations)
 - Wuzzit Trouble (multiples, problem solving)
 - Prime Smash (prime numbers and factors)
 - Dragon Box Math (big numbers, algebra, and geometry visual learning)

*If you have any questions or would like more suggestions, you are welcome to contact me!
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Hypercube

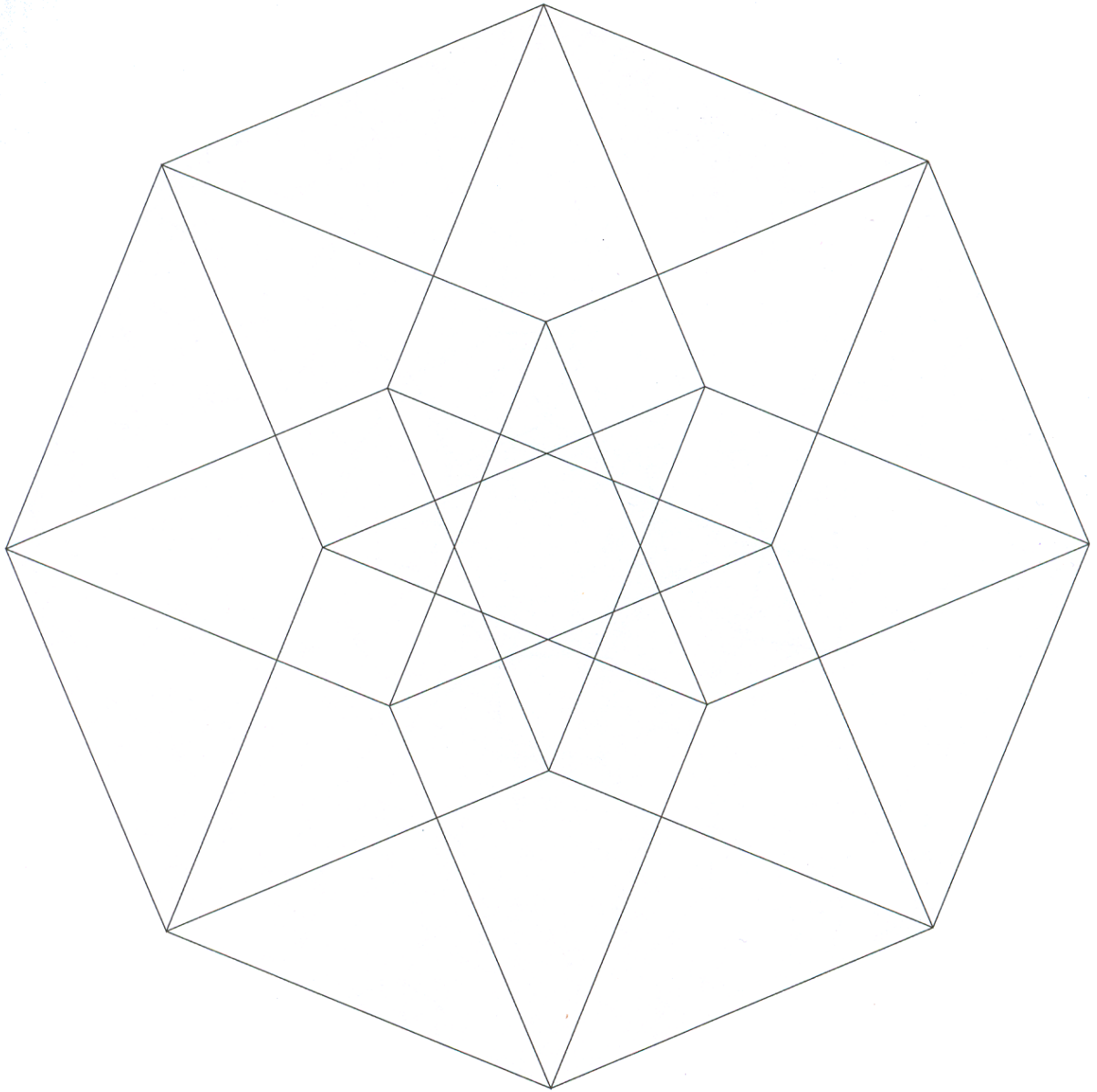


Image from Patterns of the Universe by Alex Bellos and Edmund Harris

Octaplex

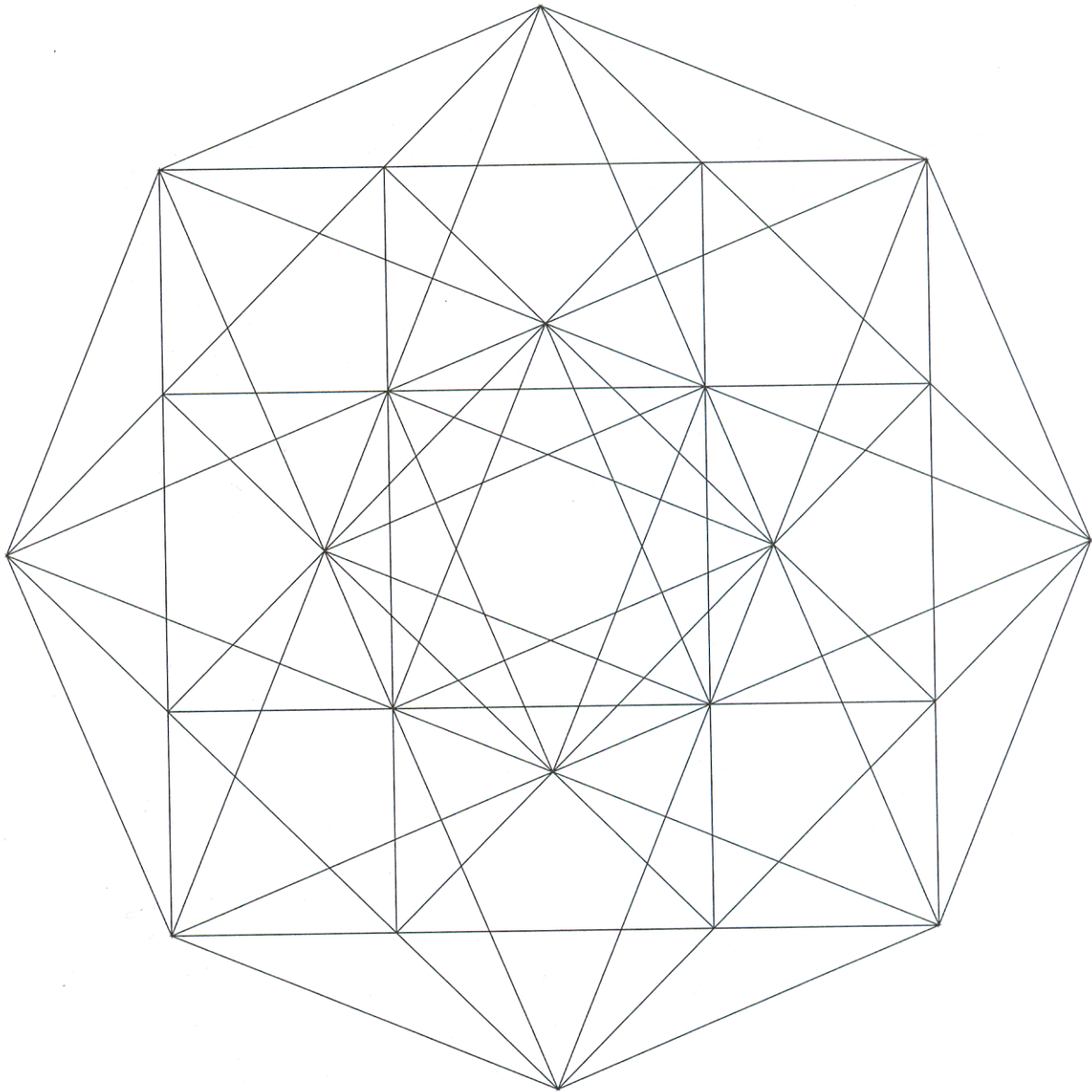


Image from Patterns of the Universe by Alex Bellos and Edmund Harris

Megadoku

2	1	3	7	13	11	12	6	5	10	14	9	8	15	4
5	4	6	10	1	14	15	9	8	13	2	12	11	3	7
1	3	2	9	15	10	11	5	4	12	13	8	7	14	6
11	10	12	1	7	5	6	15	14	4	8	3	2	9	13
6	5	4	11	2	15	13	7	9	14	3	10	12	1	8
9	8	7	14	5	3	1	10	12	2	6	13	15	4	11
10	12	11	3	9	4	5	14	13	6	7	2	1	8	15
3	2	1	8	14	12	10	4	6	11	15	7	9	13	5
13	15	14	6	12	7	8	2	1	9	10	5	4	11	3
12	11	10	2	8	6	4	13	15	5	9	1	3	7	14
14	13	15	4	10	8	9	3	2	7	11	6	5	12	1
4	6	5	12	3	13	14	8	7	15	1	11	10	2	9
7	9	8	15	6	1	2	11	10	3	4	14	13	5	12
15	14	13	5	11	9	7	1	3	8	12	4	6	10	2
8	7	9	13	4	2	3	12	11	1	5	15	14	6	10

Megadoku: Choose a different colour for each number and fill in the corresponding squares

Image from Patterns of the Universe by Alex Bellos and Edmund Harris

Tridoku

9 2 4	3 8 1	6 5 7	7 3 5	4 6 2	1 9 8	8 1 6	5 7 9	2 4 3
8 1 6	2 7 3	5 4 9	9 2 4	6 5 1	3 8 7	7 3 5	4 9 8	1 6 2
7 3 5	1 9 2	4 6 8	8 1 6	5 4 3	2 7 9	9 2 4	6 8 7	3 5 1
6 8 1	9 5 7	3 2 4	4 9 2	1 3 8	7 6 5	5 7 3	2 4 6	8 1 9
5 7 3	8 4 9	2 1 6	6 8 1	3 2 7	9 5 4	4 9 2	1 6 5	7 3 8
4 9 2	7 6 8	1 3 5	5 7 3	2 1 9	8 4 6	6 8 1	3 5 4	9 2 7
3 5 7	6 2 4	9 8 1	1 6 8	7 9 5	4 3 2	2 4 9	8 1 3	5 7 6
2 4 9	5 1 6	8 7 3	3 5 7	9 8 4	6 2 1	1 6 8	7 3 2	4 9 5
1 6 8	4 3 5	7 9 2	2 4 9	8 7 6	5 1 3	3 5 7	9 2 1	6 8 4

Tridoku: Choose a different colour for each number and fill in the corresponding squares